

Decomposition of the Marine Light Attack Helicopter Squadron  
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To  
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Presently, two airframes, the UH-1N Huey and the AH-1W Super Cobra, are combined into composite Marine light attack helicopter squadrons (HMLAs). With the introduction of the UH-1Y, the Marine Corps must reconsider the composition of the HMLA. In order to implement the lessons learned from Viet Nam, maximize training during high operational tempo, and enable effective task organization for the MAGTF Commander, the HMLA must be decomposed.

## **Background**

### *Modernizing the Force*

According to the *United States Marine Corps Concepts and Programs 2007*, the Marine Corps is in the process of modernizing in an effort to "restore and enhance the capabilities of its existing aircraft" for the next ten to twenty years.<sup>1</sup> Several rotary-wing modernization programs are currently being fielded. These programs include the transition from the CH-46E and CH-53D to the MV-22, the development of the CH-53K to replace the CH-53E, the introduction of the UH-1Y to replace the UH-1N, and the upgrade of the AH-1W to the AH-1Z.

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<sup>1</sup> Headquarters, US Marine Corps, Programs and Resources Department, Assessment and Acquisition Branch, *Marine Corps Concepts and Programs 2007* (Washington, DC, 2007), 51.

In a May 2000 Marine Corps *Gazette* article, Lieutenant General Frederick McCorkle stressed the importance of the preservation and enhancement of the utility helicopter capability.<sup>2</sup> Currently, the Marine Corps has only the UH-1N Huey helicopter accomplishing the utility mission. In its existing state, the UH-1N is ill-suited to complete all facets of this mission effectively, hence the introduction of the UH-1Y.

### *The Utility Mission*

With the introduction of the UH-1Y there will be a revitalization of the utility mission. Assuming the MV-22 performs as advertised, the UH-1Y will need to carry out a portion of the medium lift role. Major Stephen M. Jones notes, "The utility mission will flourish during this time because commanders will be reluctant to waste high-priced, sophisticated aircraft upon a low-tech, high-risk job- the utility mission."<sup>3</sup>

The utility role is often misunderstood.<sup>4</sup> Those in the Huey community understand the multi-mission aspect of the airframe;

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<sup>2</sup> Lieutenant General Frederick McCorkle, "Transforming Marine Aviation," *Marine Corps Gazette*, Vol. 84, Iss. 5, 26.

<sup>3</sup> Stephen M. Jones, "The Future of the UH-1: Will It Be Around the Next Time It's Needed?" *Marine Corps Gazette*, Vol. 76, Iss. 5, 52.

<sup>4</sup> According to the Air NTTP 3-22.3-UH-1N the mission of the Huey includes assault support transport of combat troops, casualty evacuation operations, armed escort for assault helicopters, assault support for maritime special

nevertheless, in other aircraft communities there is a prevalent fear of a utility aircraft encroaching on their missions.

Instead of amplifying the utility mission, "attempts were made to narrowly define its role."<sup>5</sup> As the UH-1Y revives the utility mission, the Marine Corps will rediscover the benefits of versatility.<sup>6</sup> The UH-1Y will provide an increase in lift, speed, and range over the UH-1N. According to the Bell Helicopter *UH-1Y Pocket Guide*, the UH-1Y will increase the payload by 170%, while increasing the speed and range by almost 50% as compared to the UH-1N.<sup>7</sup> These improvements translate into benefits to the MAGTF commander. He will be able to move more passengers, cargo, and ordnance farther and faster with increased loiter times in the objective area. In the airborne command and control (C2) role the UH-1Y will be able to provide up to 3.3 hours aloft.<sup>8</sup>

This versatility does not supplant the other communities in their mission. To the contrary, it allows the commander to employ each aircraft in accordance with its mission while using

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operations, armed escort for airborne and surface forces, fire support for forward and rear area forces, close air support, armed and visual reconnaissance, combined arms coordination and control, tactical recovery of aircraft and personnel, local search and rescue, and noncombatant evacuation operations.

<sup>5</sup> Major Kevin M. Heartwell, "Commonality Beyond Airframes: Should the Marine Corps Transition to a Combined HMLA Pilot MOS?" (Unpublished research paper, Quantico, Virginia: Command and Staff College, 1999). <http://12.1.239.226/isysquery/irl1b7b/1/doc>

<sup>6</sup> Heartwell, "Commonality".

<sup>7</sup> Dave Wyatt, ed., *Bell UH-1Y Pocket Guide* (USA: Bell Helicopter Textron, Inc., 2006), 7.

<sup>8</sup> Wyatt, *Bell UH-1Y*, 64.

the Huey to augment where he deems necessary and to accomplish other missions not otherwise addressed.

## **Lessons Learned**

In order to implement the lessons learned from Viet Nam, the HMLA must be decomposed. Due to constraints experienced in Viet Nam, the Huey was forced to fulfill missions beyond its intended role as a utility platform. The first UH-1E was procured by the Marine Corps on 21 February 1964. The initial plan called for 24 aircraft to be placed in each of the three Marine observation squadrons (VMOs) conducting observation and assault support missions.<sup>9</sup> The UH-1E replaced the outdated HOK-1 helicopter and augmented the use of the Cessna O-1 Birdog. As Hueys initially were unarmed, they required escorts when conducting utility missions. Prior to 1965, Marine Corps fixed-wing attack aircraft were not allowed to fly in Viet Nam; hence, the need to arm Hueys emerged. The armament, however, was designed for self defense only.<sup>10</sup> Once armed, the UH-1Es in Viet Nam immediately began to take over the role of escorting the UH-34 Seahorse and other UH-1E Hueys during assault support

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<sup>9</sup> Lieutenant Colonel William R. Fails, *Marines and Helicopters: 1962-1973* (Washington, D.C., History and Museums Division, Headquarters, U.S. Marine Corps, 1978), 109.

<sup>10</sup> Fails, *Marines and Helicopters*, 89.

missions. These missions were being conducted superbly, although, at the expense of the intended mission of "observation and administrative-liaison-utility."<sup>11</sup> In July 1967, Lieutenant General Victor H. Krulak reported on the issue at the annual General Officers' Symposium:

I believe our VMO has not been optimally used. Its function has been altered, in part from predominantly observation, command, control and liaison to the role of the attack aircraft; that is to say, 2.75-inch rocket and machine gun close air support.<sup>12</sup>

The solution was reorganization. With the introduction of the OV-10A Bronco, the VMOs in 1968 retained twelve armed UH-1E gunships while the unarmed UH-1E "slicks" were organized into three Marine light helicopter squadrons (HMLs) of twelve aircraft each. Within a span of two weeks, from 15 March to 1 April 1968 three HMLs (167, 267, and 367) commissioned at Marble Mountain (Viet Nam), Camp Pendleton (California), and Phu Bai (Viet Nam), respectively, assumed the utility and administrative mission while the armed UH-1Es left in the VMOs assumed the armed escort mission.<sup>13</sup> This reorganization was conducted primarily to alleviate the misuse of observation helicopters;

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<sup>11</sup> General Keith B. McCutcheon, 1967 General Officers' Symposium, quoted in Fails, *Marines and Helicopters*, 112.

<sup>12</sup> Victor H. Krulak, 1967 General Officers' Symposium, quoted in Fails, *Marines and Helicopters*, 111.

<sup>13</sup> Fails, *Marines and Helicopters*, 113.

however, equipping both VMOs and HMLs with UH-1Es created a shortage of the aircraft.

To alleviate this shortage General McCutcheon, then Deputy Chief of Staff (Air), recommended the procurement of "helicopters which were specifically designed as armed escorts and assign 12 of them to each of the VMOs, replacing the rest of the UH-1Es."<sup>14</sup> In January 1968, General McCutcheon, in a letter to the newly appointed Commandant of the Marine Corps, General Chapman, wrote the following:

...the armed helicopter has proven to be an absolute necessity in the delivery of close-in fire suppression support during vertical assault operations. Existing UH-1Es were modified to fulfill this requirement. However, in so doing, the availability of the UH-1E for performing the missions for which the aircraft was procured was degraded. While the modified UH-1Es are now doing a creditable job, the AH-1 will provide greater speed and firepower and more flexibility in the performance of the armed helo mission. The AH-1 will also free the UH-1s for light helicopter utility mission[s], many of which are now neglected.

The AH-1G Huey Cobra was sent to the VMOs in Viet Nam in 1969 in accordance with General Krulak's recommendation and General McCutcheon's plan.<sup>15</sup> Then in a move entirely contrary to the Generals' proposals, all AH-1Gs were transferred to the HMLs. This reorganization, however, was short lived; one year after the transfer, three active and one reserve Marine attack

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<sup>14</sup> Fails, *Marines and Helicopters*, 113.

<sup>15</sup> Naval Historical Center, Department of the Navy, *AH-1W Super Cobra and UH-1N Huey* (Washington Navy Yard, Washington, D.C.) November, 2000.



helicopter squadrons (HMAs) were commissioned. Transfer of all AH-1Gs to the HMAs, retention of all UH-1Es by the HMLs, and custody of all OV-10As by the VMOs characterized the definitive organization of rotary wing Marine aircraft groups (MAGs) for the 1970s and 1980s. This organization remained in effect until the mid 1980s when, in an effort to distribute assets more efficiently, the HMAs and HMLs were combined into HMLAs.<sup>16</sup>

According to Major Randy D. Smith:

The Marines combined two models of aircraft with completely different missions into a single squadron solely to make up for personnel and resource shortfalls. This concession has now become the basis for procurement decisions. Rather than organizing based on a concept or the capabilities of the platform[s], the Marine Corps is developing equipment based upon the organization of the squadrons.<sup>17</sup>

At first, HMLAs consisted of 12 of each type of aircraft. This mix of aircraft remained until the 1990s when the HMLAs primary aircraft authorized (PAA) for UH-1Ns was reduced from 12 to the current authorization of nine due to attrition.<sup>18</sup> History demonstrates, as pointed out by General Krulak, the need to organize squadrons based on mission. This organization is the most effective and efficient basis for squadron configuration and must be reinstituted.

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<sup>16</sup> Keith A. Smith, "On Land, Sea, and in the Air: Marine Aviation FY-87 Posture Statement," *Marine Corps Gazette*, Vol. 70, Iss. 5, 68.

<sup>17</sup> Major Randy D. Smith, "Zulu Dawn: Fielding the AH-1Z," (unpublished research paper, Quantico, Virginia: Command and Staff College, 1999). <http://12.1.239.226/isysquery/irl11e9/1/doc>

<sup>18</sup> Smith, "Zulu Dawn".

## **Training**

Decomposition of the HMLA into HMAs and HMLs will alleviate the reduction in training time that has arisen with the increase in operational tempo. With over 60 pilots and over three hundred enlisted Marines in a squadron, the amount of training that needs to be accomplished in a short time has reached the point of diminishing returns. With the anticipated addition of the medium-lift missions the commanding officers of HMLAs will be required to train not only the gunship mission and the utility mission but the additional medium-lift mission as well. Lieutenant Colonel Stephen W. Hall writes, "If this is the case, are we really going to ask HMLA COs to train squadrons for medium lift and attack? We might as well [combine] VMFA and VMGR squadrons."<sup>19</sup>

## **Task Organization**

Decomposition of the HMLA into HMAs and HMLs will remove inherent limitations placed on the MAGTF commander and allow him maximum flexibility to task organize effectively at the

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<sup>19</sup> Lieutenant Colonel Stephen W. Hall, e-mail message to author, December 13, 2007.

appropriate levels. Due to the lift, range, and airspeed limitations of the UH-1N, the airframe has been relegated to accomplishing just a fraction of its designed mission. The MAGTF commander has been forced to employ Hueys in accordance with these limitations and therefore leaving the HMLAs intact has not been an issue. However, with the emergence of the UH-1Y and the resurgence of the utility mission, the MAGTF commander will now realize the inflexibility he has endured. The pseudo-task-organization currently in place at the squadron level, once undone, will allow the MAGTF commander to task organize the ACE based on mission and aircraft capabilities rather than based on squadron composition.

### **Counterarguments**

There will undoubtedly be many who will argue against decomposition of the HMLA. The three main opposing arguments are examined here.

Some may argue that the current structure of the HMLA supports effective, integrated training. The reality is that the benefit gained by training with other aircraft types within the same squadron is far outweighed by the detrimentally prohibitive requirements to train aircrew in the few training days afforded due to the high operational tempo. The small

effort required to coordinate training between an HMA and an HML would be equivalent to the effort currently required to coordinate training between an HMLA and an HMM, for example.

Regarding task organization, detractors will argue that the HMLA is inherently so. Task organization is, by its definition, a temporary grouping of assets by a higher commander to accomplish a specific mission. A Marine expeditionary unit (MEU) is a task organization. A mechanized task force is a task organization. The HMLA is a table of organization and equipment (T/O&E) forced upon the MAGTF commander whether the mission requires that mix or not. Task organization for the MAGTF should occur at the aviation combat element (ACE) not at the squadron.

Some proponents of the current squadron organization will argue that the H-1Y/Z upgrade program is specifically designed for the HMLA to cut costs on maintenance and manpower due to 84% parts commonality. The maintenance savings due to commonality are realized at the MAG/MALS (Marine aircraft logistics squadron) level not the HMLA squadron level. Therefore, there is no need to keep the HMLA together specifically because of the H-1Y/Z upgrade program. In addition, if there is no change to the mix of aircraft, that is to say the HMLA T/O remains 18 and 9 for AH-1Zs and UH-1Ys respectively, then although the number

of dissimilar parts is reduced, similar numbers of personnel will still be required to maintain the aircraft. This being said, the need for the AH-1Z upgrade program is questionable. The AH-1W with a new transmission, new FLIR, and new skids will extend the life of the airframe until 2020 and the introduction of the joint replacement aircraft.<sup>20</sup>

## **Conclusion**

Viet Nam demonstrated the need to separate the utility and gunship missions. At the time this need was highlighted by General McCutcheon and Lieutenant General Krulak. The separate squadron model worked successfully for over a decade. Contrary to lessons learned, the Marine Corps combined the two aircraft into composite squadrons losing the ability to maximize training and creating inflexibility for the MAGTF Commander. The Marine Corps must use the introduction of the UH-1Y as an opportunity to correct this blunder.

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<sup>20</sup> *Marine Corps Gazette*, "Update on H-1 Remanufacture Program," Vol. 83, Iss.1, 8.

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